Curriculum Vita
James T. Thorson
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Education

Ph.D. School of Aquatic and Fisheries Sciences (SAFS), University of Washington (UW), 2009-2011.
M.Sc. Department of Fisheries and Wildlife (FiW), Virginia Tech (V.T.), 2007-2009.
B.Sc. Environmental Studies, Philosophy, Minor: Economics, Emory University 2002-2006.

Employment

Operations Research Analyst, National Marine Fisheries Service, June 2012 – present.
Post doctoral researcher, National Marine Fisheries Service, March 2012 – June 2012.
Research Scientist, Commonwealth Scientific and Industrial Research Organization, July-Aug. 2011.

Stock Assessments

Gertseva, V., and Thorson, James T.. In progress. Stock assessment for darkblotched rockfish *Sebastes crameri.*

Stewart, Ian J., Thorson, James T., and Wetzel, Chantel. 2011. Stock assessment for sablefish *Anoplopoma fimbria.*

Current research

In review. Thorson, J.T., Stewart, I.J., Taylor, I., and Punt, A.E. Meta-analysis using stock assessment software: a rigorous approach to estimating life history traits and correlations.

In review. Thorson, J.T., Ward, E. Accounting for space-time interactions in index standardization models.

In review. Ward, E.J., Holmes, E.E., Thorson, J.T., Collen, B. Comparison of parametric and non-parametric methods for short-term population forecasting.

In review. Thorson, J.T., Cope, J., and Patrick, W.S. Assessing the quality of life history information in publicly available databases.

In review. Thorson, J.T., Scheuerell, M., Buhle, E., and Copeland, T. Spatial diversity buffers temporal variability in early juvenile survival for an endangered Pacific salmon.

In preparation. Froese, R., and Thorson, J.T. Bayesian approach to estimation of length-weight relationships in fishes.

In preparation. Thorson, J.T., Munch, S., and Ono, K. Separately estimating process, measurement, and model errors using a semi-parametric state-space model for density dependence.

In preparation. Thorson, J.T., Kleisner, K., Samhouri, J., Ward, E., Shelton, A. and Cope, J. Giant shoulders 15 years later: Lessons, challenges, and guidelines in fisheries meta-analysis.

In preparation. Zipkin, E., Lynch, H., Thorson, J.T., Royle, A., Grant, E., Kanno, Y., See, K, and Chandler, D. Multi-state population models from count data.

Publications (n = 20)

In press. Thorson, J.T., Taylor, I., Stewart, I. J., and Punt, A.E. Using a recruitment-linked multispecies stock assessment model to estimate common trends in recruitment for U.S. West Coast groundfishes. *Marine Ecology Progress Series.*

In press. Thorson, J.T., Clarke, M.E., Stewart, I. J., and Punt, A.E. The implications of spatially varying catchability on bottom trawl surveys of fish abundance, and a proposed solution involving underwater vehicles. *Canadian Journal of Fisheries and Aquatic Sciences.*

In press. Thorson, J.T., Zhou, S., Punt, A.E., and Smith, A.D.M. A stepwise-selected spline approximation to time-varying parameters, with application to occupancy modelling. *Methods in Ecology and Evolution.*

In press. Stewart, I. J., Hicks, A., Taylor, I., Thorson, J.T., Wetzel, C. and Kupschas, S. A comparison of stock assessment uncertainty estimates using maximum likelihood and Bayesian methods implemented with the same model framework. *Fisheries Research*.

In press. Plagányi, E.E., Punt, A.E., Hillary, R., Morello, E.B., Thebaud, O., Hutton, T., Pillans, R., Thorson, J.T., Fulton, E.A., Smith, A.D.M., Bayliss, P., Haywood, M., Lyne, V., and Rothlisberg, P.C. Multispecies fisheries management and conservation: tactical applications using models of intermediate complexity. *Fish and Fisheries*.

In press. Lapointe, Nicholas WR., Thorson, J.T., and Angermeier, P.L. Interactions between natural and anthropogenic drivers of invisibility in freshwater ecosystems. *Biological Invasions.*

2012. Gutierrez, N.L., Valencia, S.R., Branch, T.A., Agnew, D.J., Baum, J.K., Bianchi, P.L., Cornejo-Donoso, J., Costello, C., Defeo, O., Essington, T.E., Hoggarth, D., Larsen, A., Ninnes, C., Selden, R.L., Sistla, S., Smith, A.D.M., Stern-Pirlot, A., Teck, S.J., Thorson, J.T., Williams, N.E. Eco-Label Conveys Reliable Information on Fish Stock Health to Seafood Consumers. *PLoS One* 7(8) e43765

2012. Thorson, J.T., Cope, J., Branch, T., and Jensen, O. Spawning biomass reference points for exploited marine fishes, incorporating taxonomic and body size information. *Canadian Journal of Fisheries and Aquatic Sciences* 69(9): 1556-1568.

2012. Zhou, S., Thorson, J.T., Yin, S., Smith, A.D.M., and Fuller, M. Linking fishing mortality biological reference points to life history traits: an empirical study. *Canadian Journal of Fisheries and Aquatic Sciences* 69 (8), 1292-1301(10)

2012. Thorson, J.T., Stewart, I., and Punt, A. Development and application of an agent-based model to evaluate methods for estimating stock abundance for shoaling fishes such as Pacific rockfish (*Sebastes* spp.). *ICES Journal of Marine Sciences* 69 (4):635-647.

2012. Thorson, J.T., Punt, A.E, and Nel, R. Evaluating population recovery for sea turtles under nesting beach protection while accounting for nesting behaviors and changes in availability. *Journal of Applied Ecology* 49: 601-610.

2012. Thorson, J.T., Branch, T., and Jensen, O. Using model-based inference to evaluate global fisheries status from landings, location and life history data. *Canadian Journal of Fisheries and Aquatic Sciences* 69: 645–655.

2011. Thorson, James T. Focal and auxiliary assessment models: A proof-of-concept involving time-varying catchability and stock status estimation. *ICES Journal of Marine Sciences*, 68: 2264-2276.

2011. Thorson, James T., Stewart, Ian, and Punt, André E. Accounting for fish shoals in single- and multi-species survey data using mixture distribution models. *Can. J. Fish. Aquat. Sci.*, 68(9): 1681-1693.

2011. Thorson, James T., and Prager, Michael H. Better catch curves: Incorporating age-specific natural mortality and logistic selectivity. *Transactions of the American Fisheries Society.* 140:2, 356-366.

2010. Lapointe, NWR, Thorson, JT, Angermeier, PL. Seasonal meso- and microhabitat selection by the northern snakehead (*Channa argus*) in the Potomac river system. *Ecology of Freshwater Fishes*. 9:566-577.

2010. Thorson, James T. and Berkson, J. Multispecies estimation of Bayesian priors for catchability trends and density dependence in the US Gulf of Mexico. *Can. J. Fish. Aquat. Sci.* 67:936-954.

2010. Thorson, J, Berkson, J., and Murphy, B. Competing interests, economics, and marine fisheries management. *Journal of Natural Resources and Life Sciences Education*, 39:71-78.

2009. Thorson, J., and Berkson, J. Evaluating single- and multi-species procedures to estimate time-varying catchability functional parameters. *Fisheries Research* 101:38-49.

2009. Wilberg, M., Thorson, J., Linton, B., and Berkson, J. Incorporating time-varying catchability into population dynamics stock assessment models. *Reviews in Fisheries Science*, 18(1):7-24.

2009. Thorson, J. and Simpfendorfer, C. Gear selectivity and sample size effects on growth curve selection in shark age and growth studies. *Fisheries Research* 98:75-84.